

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks.

Status of Claims

Claims 1-23 are currently pending in the application of which claims 1, 7, 17 and 23 are independent. Claims 1-23 were rejected.

By virtue of the amendments above, independent claims 1 and 7 have been amended. Support for the amendments in claims 1 and 7 may be found in the specification, at least on page 4, lines 26-31.

No new matter has been introduced by way of the amendments above. Entry thereof is therefore respectfully requested.

Request for Interview

The Applicant hereby requests that the Examiner grant an interview with the undersigned prior to issuance of another Office Action. An interview request form PTOL-413A is submitted herewith. As discussed in that request form, the Applicant would like to discuss the amendments and remarks in this response and any suggestions that the Examiner may have in order to expedite the prosecution of the present application.

Summary of the Office Action

Claims 17-23 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 6-7, and 13-16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,473,599 to Li et al. (hereinafter “Li”) in view of U.S. Patent Application Publication No. 2003/0200333 to Espieu et al. (hereinafter “Espieu”)

Claims 2-3, and 8-10 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li in view of Espieu, and further in view of RFC 1256 by S. Deering (hereinafter “Deering”).

Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li and Espieu, and further in view of RFC 792 by J. Postel (hereinafter “Postel”).

Claims 5 and 11-12 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li in view of Espieu and Postel, and further in view of U.S. Patent No. 7,010,611 to Wiryaman et al. (hereinafter “Wiryaman”).

Claims 17-18 and 21-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,295,276 to Datta et al. (hereinafter “Datta”) in view of U.S. Patent No. 5,963,540 to Bhaskaran.

Claims 19-20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Datta in view of Bhaskaran and further in view of Wiryaman.

The aforementioned rejections are respectfully traversed for at least the reasons set forth below.

Claim Rejection Under 35 U.S.C. §112, First Paragraph

Claims 17-23 were rejected under 35 U.S.C. §112, first paragraph, as failing to provide support in the specification for amended features recited in independent claims 17 and 23. Specifically, the Office Action alleges that, in the specification, “the host sends out

the ARP request message instead of the first router sends out the ARP request message to the plurality of routers” (See *Office Action*, page 4).

However, that allegation is respectfully traversed because the specification has proper support for the subject matter recited in the claims. The specification, page 6, lines 18-26 discloses,

Here, the automated process for load balancing between routers begins when one of the hosts 102 wants to send a packet to a new external destination 110 and broadcasts 304 an ARP request message to the LAN 104. ARP refers to address resolution protocol. ARP may be used to translate an IP address of a destination host to a physical address. A look-up table (ARP cache) may be used to perform the translation. If the IP address is not found in the ARP cache, an ARP request message may be broadcast to the network. For proxy ARP or transparent subnetting, the destination host does not receive and respond to the broadcast, but a router to that destination does.

Thus, from the disclosure above, initially, a host 102 sends an ARP request message to the LAN. That means the ARP request message from the host is received by a router in the LAN to process the message. This router is the “first router” recited in claims 17 and 23.

Next, the phrase “A look-up table (ARP cache) may be used to perform the translation” refers to the look-up table located in the first router that receives the ARP request message from the host. Although the specification does not indicate that the look-up table (ARP cache) is of a router, it is well known in the art that every router has a look-up table to route data packets. Thus, the phrase quoted above means the first router that receives the ARP request message uses its look-up table (ARP cache) to translate an IP address of the destination to a physical address.

Next, the phrase “If the IP address is not found in the ARP cache, the ARP request message may be broadcast to the network” means if the first router does not find the IP

address of the destination in its look-up table (ARP cache), the first router sends the ARP request message that it has received to the other routers in the network.

As such, the specification has full support for the features recited in claims 17-23. Therefore, withdrawal of this rejection is respectfully requested.

Claim Rejections Under 35 U.S.C. §103(a)

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claims would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device

(method, or product) ready for improvement to yield predictable results; (E) “‘Obvious to try’”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claims and, thus, the claims are distinguishable over the cited reference(s).

- **Claims 1, 6-7, and 13-16:**

Claims 1, 6-7, and 13-16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li in view of Espieu. This rejection is respectfully traversed for at least the following reasons.

- **Independent Claim 1:**

As amended, independent claim 1 recites a method comprising, *inter alia*,

applying an algorithm at the first router to select a second router from the plurality of routers to be a next gateway for the source host for packets destined to the destination host in response to a determination that the packet is to be routed by another one of the plurality of routers.

Li in view of Espieu fails to teach or suggest the features recited above in claim 1 for at least the following reasons.

Li discloses in Fig. 2a a network segment 118 including a host H, real routers R1-R3, and a virtual router R4 (See col. 6, lines 27-39). With the virtual router R4, the host H can send data to the MAC and IP addresses of the virtual router R4 even though that data is routed through one of the routers R1-R3 (See col. 6, lines 40-57 and col. 7, lines 1-7). At any one time, one of the routers R1-R3 is the active router and another one of the routers is a standby router for the network (See col. 6, lines 40-59). The active router receives packets from the host H and forwards the packets to their destinations.

In the rejection of claim 1, the Office Action asserts that the features “applying an algorithm at the first router to select a second router [from the plurality of routers] to be a next gateway for the source host for packets destined to the destination host in response to a determination that the packet is to be routed by another one of the plurality of routers” recited in claim 1 are disclosed in col. 6, lines 27-40 of Li (See *Office Action*, page 5). However, that assertion is respectfully traversed for at least the following reasons.

In col. 6, lines 27-40, Li discloses that, when the active router receives a packet from the host H and decides that the optimal route for the packet is through the standby router, the active router sends an ICMP redirect packet to the host H to instruct the host H to use the standby router. The host H then requests for the standby router’s primary address and routes packets through the standby router.

As such, in Li, when the active router decides that the optimal route for the packet from the host to take is through the standby router and instructs the host to use the standby router, the active router merely identifies the standby router and provides the identity of the standby router to the host. Thus, the active router in Li does not run an algorithm to select a router from a plurality of routers in the network to be the next gateway. In fact, the active

router in Li does not even have the option of selecting a router from a plurality of routers to be the next gateway. Instead, the active router simply identifies the standby router that has already been assigned as the backup router in the network. Identifying the predetermined standby router is different from selecting a router from a plurality of routers to be the next gateway. Therefore, contrary to the assertion in the Office Action, Li fails to teach or suggest, “applying an algorithm at the first router to select a second router to be a next gateway for the source host for packets destined to the destination host in response to a determination that the packet is to be routed by another one of the plurality of routers,” as recited in claim 1.

Espieu also fails to describe or suggest the features recited above in claim 1. Espieu discloses a system for balancing the load among the routers in the system. As shown in Fig. 1 of Espieu, the system includes a network 10, routers 12, 14, and 16, and servers 18, 20, and 22, wherein the servers 18, 20, 22 transmit data to the network 10 through one of the routers 12, 14, 16 (See paragraph [0009]). In Espieu, the method of load balancing is achieved by having each router examine its current load and, if the current load is higher than a threshold, assign a new priority for the servers, such that the flow of data from a server is automatically transferred to another router with a higher priority (See *Espieu*, paragraphs [0009] and [0018]). In other words, in Espieu, all of the routers are prioritized themselves into a ranking so that the servers know which routers to use (See also *Espieu*, paragraph [0020]).

As such, in Espieu, the routers prioritize themselves into a ranking to divert data flows to other routers. As a result, the routers in Espieu do not apply an algorithm to select another router to be the next gateway for the servers. Espieu, thus, fails to teach or suggest, “applying an algorithm at the first router to select a second router to be a next gateway for the

source host for packets destined to the destination host in response to a determination that the packet is to be routed by another one of the plurality of routers,” as recited in claim 1. As such, Espieu fails to cure the deficiencies of Li.

For at least the foregoing reasons, the Office Action has failed to establish that independent claim 1 is *prima facie* obvious in view of the combined disclosures contained in Li in view of Espieu, as proposed in the Office Action. Therefore, withdrawal of the rejection of independent claim 1 and allowance of the claim is respectfully requested.

- Independent Claim 7:

As amended, independent claim 7 recites, *inter alia*,

a selection module configured to ... apply an algorithm to select a second router from the plurality of routers to be a next gateway of the source host for packets destined to the destination host, wherein the second router is un-predetermined.

Thus, these features of independent claim 7 are similar to those recited in independent claim 1 as discussed above. Accordingly, independent claim 7 is also believed to be allowable over the cited documents of record for at least the same reasons as set forth above in connection with independent claim 1. It is therefore respectfully requested that the rejection of independent claim 7 be withdrawn, and this claim be allowed.

- Dependent Claims 6 and 13-16:

Claims 6 and 13-16 are dependent from one of independent claims 1 and 7. Thus, they are also believed to be allowable over the cited documents of record for at least the same reasons as set forth above in connection with independent claims 1 and 7. It is therefore

respectfully requested that the rejection of claims 6 and 13-16 be withdrawn, and these dependent claims be allowed.

Furthermore, these dependent claims recite additional features not found in the cited documents of record. For instance, claim 13 recites,

wherein the apparatus is configured to communicate load levels to and receive load levels from other routing apparatus, and wherein the selection module applies a load-based algorithm.

In the rejection of claim 13, the Office Action asserts that the features recited above in claim 13 are disclosed in Li, col. 8, lines 45-67 and col. 9, lines 1-42 (See *Office Action*, page 7). However, that assertion is respectfully traversed. In the cited passages, Li discloses how the active and standby routers are selected, such as by the priorities of the routers, in which the router with the highest priority is selected as the active router and the router with the second highest priority as the standby router (col. 9, lines 27-42). Li also discloses that the priority is configured by the user of the network (col. 9, lines 28-29). As such, col. 8, lines 45-67 and col. 9, lines 1-42 of Li fails to teach or suggest a load-based algorithm, or an apparatus that communicates load levels with another apparatus, as recited in claim 13. Therefore, Li fails to teach or suggest the features recited in claim 13.

Claim 14 recites, “wherein the load-based algorithm comprises a weighted hash algorithm.” The Office Action asserts that the feature recited in claim 14 is disclosed in col. 8, lines 45-67 and col. 9, lines 1-42 of Li, wherein “the IP address is the weighted hash algorithm” (See *Office Action*, page 7). However, that assertion is respectfully traversed. First, as discussed above with respect to claim 13, there is no “load-based algorithm” in col. 8, lines 45-67 and col. 9, lines 1-42 of Li. Second, an IP address is an address of a device and is not an algorithm, much less a “weighted hash” algorithm. Therefore, Li fails to teach or

suggest “wherein the load-based algorithm comprises a weighted hash algorithm,” as recited in claim 14.

Claim 15 recites “wherein the load-based algorithm comprises a weighted round robin algorithm” and claim 16 recites “wherein the load-based algorithm comprises a pseudo-random algorithm.” In the rejection of claims 15 and 16, the Office Action asserts that “since the weighted hash algorithm can be perform [sic] therefore the other similar types of algorithms can also be perform [sic] in similar manner” (See *Office Action*, bottom of page 7 and top of page 8). However, that assertion is respectfully traversed because, as discussed above with respect to claims 13 and 14, there is no “load-based algorithm” or “weighted hash algorithm” in Li. Therefore, the Li also fails to teach or suggest the features recited in claims 15 and 16 above.

- **Claims 2-3, and 8-10:**

Claims 2-3, and 8-10 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li in view of Espieu, and further in view of Deering. This rejection is respectfully traversed for at least the following reasons.

Claims 2-3, and 8-10 are dependent from one of independent claims 1 and 7. As discussed above, the proposed combination of Li and Espieu fails to disclose all of the features of independent claims 1 and 7. In setting forth the rejection of claims 2-3, and 8-10, the Examiner has not and cannot reasonably assert that the disclosure contained in Deering makes up for any of the deficiencies with respect to the proposed combination. Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to modify the proposed combination of Li in view of Espieu with the disclosure

contained in Deering, the proposed modification would still fail to yield all of the features of independent claims 1 and 7.

For at least the foregoing reasons, the Office Action has failed to establish that claims 2-3, and 8-10 are *prima facie* obvious in view of the combined disclosures contained in Li, Espieu, and Deering. Therefore, withdrawal of the rejection of claims 2-3, and 8-10 and allowance of these claims are respectfully requested.

Furthermore, these dependent claims recite additional features not found in the cited documents of record.

For example, claim 2 recites, “wherein the algorithm comprises a pseudo-random algorithm.” In the rejection of claim 2, the Office Action asserts that page 10 of Deering discloses a pseudo-random algorithm (See *Office Action*, page 8). However, that assertion is respectfully traversed. Page 10 of Deering discloses a system in which a host sends a request or solicitation for IP broadcast addresses of routers, and the routers respond to the request. Page 10 of Deering also discloses that to prevent synchronization with other responding routers, a router may respond in a small random interval not greater than a predetermined delay, and the interval timer is reset to a new random value (See *Deering*, top of page 10).

As such, the disclosure on page 10 of Deering relates to a host sending a request for an IP address and a router responding to the request. However, the disclosure on page 10 of Deering is unrelated to an algorithm being applied at a first router to select a second router as the next gateway for the host. Therefore, Deering fails to teach or suggest the algorithm recited in claim 2.

In addition, even if assuming for the sake of argument that Deering disclosed a pseudo-random algorithm for selecting a second router, it still would not have been obvious

for one skilled in the art to utilize the teaching of Deering into Li. As discussed above, in Li, col. 6, lines 27-40, when the active router decides that packets should be sent through the standby router, the standby router is already being determined. In other words, the active router does not select another router to be the next gateway at random. As a result, the active router in Li would not have used a pseudo-random algorithm, a round robin algorithm, or a hash algorithm to select the standby router as the next gateway. Therefore, one skilled in the art would not have utilized the non-existing pseudo-random algorithm of Deering into Li.

Claim 8 recites features similar to those of claim 2. Thus, the same arguments against the rejection of claim 2 above apply to claim 8.

Claim 3 recites “wherein the algorithm selects the next default gateway using a round robin type selection process.” Claim 9 recites “wherein the selection module applies a round-robin type algorithm to select the next gateway.” And claim 10 recites, “wherein the selection module applies a hash function.” The Office Action rejects claims 3, 9, and 10 by asserting that “since the pseudo-random algorithm can be perform [sic] therefore the other similar types of algorithms can also be perform [sic] in similar manner” (See *Office Action*, page 8). However, that assertion is respectfully traversed. As discussed above with respect to claim 2, one skilled in the art would not have used a round robin algorithm or hash algorithm into Li to select the standby router as the next gateway, because in Li, the standby router is already selected, i.e., predetermined.

- **Claim 4:**

Claim 4 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li and Espieu, and further in view of Postel. This rejection is respectfully traversed for at least the following reasons.

Claim 4 is dependent from independent claim 1. As discussed above, Li and Espieu fails to disclose all of the features of independent claim 1. In setting forth the rejection of claim 4, the Examiner has not and cannot reasonably assert that the disclosure contained in Postel makes up for any of the deficiencies with respect to the proposed combination. Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to modify the proposed combination of Li in view of Espieu with the disclosure contained in Postel, the proposed modification would still fail to yield all of the features of independent claim 1.

Furthermore, claim 4 recites additional features not found in the cited documents of record. Specifically, claim 4 recites,

wherein the algorithm comprises a hash function, wherein an output of the hash function returns an index of a router to be used to route subsequent packets with a same hash value.

In the rejection of claim 4, the Office Action correctly admits that Li in view of Espieu fails to teach the features recited in claim 4. The Office Action then asserts that Postel, on page 13, discloses the features of claim 4 (*Office Action*, page 9). However, that assertion is respectfully traversed. On page 13, Postel discloses that a gateway G1 receives a packet from a host, checks its routing table to obtain the address of the next gateway G2, and sends a redirect message to the host advising the host to send its packets directly to the gateway G2.

As such, the gateway G1 uses the look-up table, and does not use any hash function, to select the next gateway G2. Therefore, Postel fails to teach or suggest an algorithm comprising a hash function, as recited in claim 4.

For at least the foregoing reasons, the Examiner has failed to establish that claim 4 is *prima facie* obvious in view of the combined disclosures contained in Li, Espieu, and Postel. Thus, withdrawal of the rejection of claim 4 and allowance of this claim is requested.

- **Claims 5, and 11-12:**

Claims 5 and 11-12 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Li in view of Espieu and Postel, and further in view of Wiryaman. This rejection is respectfully traversed for at least the following reasons.

Note that the rejection of claims 11 and 12 based on Li in view of Espieu, Postel, and Wiryaman is improper because claims 11 and 12 are dependent from claim 10, and claim 10 is not rejected based on Li in view of Espieu and Postel. Rather, claim 10 is rejected based on Li in view of Espieu and Deering. Therefore, the rejection of claims 11 and 12 should also include Deering.

Claims 5 and 11-12 are dependent from independent claims 1 and 7, respectively. Thus, claims 5 and 11-12 are also believed to be allowable over the cited documents of record for at least the same reasons as set forth above in connection with independent claims 1 and 7.

Furthermore, claims 5 and 11-12 recite additional features not found in the cited documents of record. For instance, claim 5 recites, “the hash function is a function of any combination of the IP addresses of the destination and source hosts of the packet.” Similarly,

claim 11 recites “wherein the hash function is a function of a source IP address” and claim 12 recites “wherein the hash function is a function of a combination of the source and destination IP addresses.” In the rejection of claims 5 and 11-12, the Office Action asserts that Wiryaman discloses, in col. 3, lines 20-30, the hash function recited in claims 5 and 11-12 (*Office Action*, page 10). The Office Action also asserts that it would have been obvious to one skilled in the art to utilize the disclosure in Wiryaman into Li. *Id.*

However, that assertion is respectfully traversed. Although Wiryaman discloses a hash function with a hash table having source and destination addresses, the hash function of Wiryaman would not have worked in Li because, in Li, the standby router is predetermined. On the other hand, the hash function is used when the next gateway is not known or predetermined. Therefore, in Li, the active router already knows which router is the standby router, and thus, would not have used a hash function to select the standby router as the next gateway.

For at least the foregoing reasons, the Examiner has failed to establish that claims 5 and 11-12 are *prima facie* obvious in view of the combined disclosures contained in Li, Espieu, Postel and Wiryaman. Therefore, withdrawal of the rejection of claims 5 and 11-12 and allowance of these claims are respectfully requested.

- **Claims 17-18, and 21-23:**

Claims 17-18, and 21-23 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Datta in view of Bhaskaran. This rejection is respectfully traversed for at least the following reasons.

- Independent Claim 23:

Independent claim 23 recites a system comprising, *inter alia*,

in each of the plurality of routers, ...
means for identifying a current load of the plurality of routers.

Datta in view of Bhaskaran fails to teach or suggest the feature recited above in claim 23. In the rejection of claim 23, the Office Action simply repeats the above feature of claim 23, but fails to show where the support for that feature in Datta, Bhaskaran or other cited documents of record (See *Office Action*, page 11).

In fact, Datta discloses in Fig. 3 a plurality of routers 110, wherein one of the routers 110 is selected by the controller 308 to forward a data packet from the source node 306 to the destination node 330 (See *Datta*, col. 8, lines 38-57). However, Datta fails to teach or suggest that the routers 110 identify their current loads. Therefore, Datta fails to teach or suggest “means for identifying a current load of the plurality of routers” in each of the plurality of routers, as recited in claim 23.

Claim 23 also recites,

in each of the plurality of routers, ...
means for determining whether the packet is to be routed by
another one of the plurality of routers in response to the identified
current load.

In the rejection of claim 23, the Office Action asserts that the features recited above in claim 23 are disclosed in col. 15, lines 15-35 of Datta (See *Office Action*, page 11). However, that assertion is respectfully traversed. In col. 15, lines 15-35, Datta discloses,

A more complex approach to router 110 selection may be taken by using
load information 410 together with a load balancing method implemented
in the router selector 406.

As such, the passage in col. 15, lines 15-25 describes the operation of the router selector 406, which resides inside the controller 202 as shown in Fig. 5. Thus, the router selection and the load balancing method disclosed in col. 15, lines 15-25 of Datta are performed by the controller 202, and not by the routers 110. As shown in Fig. 3, the controller 202 is separate and distinct from the routers 110. Therefore, the load balancing method in Datta is performed by the controller 202, and not by the routers 110. Therefore, each of the routers 110 in Datta fails to have “means for determining whether the packet is to be routed by another one of the plurality of routers in response to the identified current load,” as recited in claim 23.

Moreover, the Office Action explains that Datta discloses in col. 13, lines 57-67 that the controller 202 may be implemented on one or more of the routers 110 (*Office Action*, page 11). However, even if the controller 202 is embedded among the routers, it is still the controller 202 that selects one of the routers 110. As such, not every router 110 in Datta has “means for determining whether the packet is to be routed by another one of the plurality of routers in response to the identified current load” as recited in claim 23. Therefore, Datta fails to teach or suggest the “means for determining” in each of the plurality of routers, as recited in claim 23.

Claim 23 also recites,

in each of the plurality of routers, ...
means for receiving the ARP request from the other ones of the
plurality of routers.

In the rejection of claim 23, the Office Action asserts that col. 15, lines 55-67 of Datta discloses the feature recited above in claim 23 (*Office Action*, bottom of page 11). However, that assertion is traversed. Col. 15, lines 55-67 discloses that the controller 202 receives the

ARP request from network client 106. The network client 106 is a host, and not a router, because a client does not route packets. As such, the ARP request disclosed in Datta is from a client, and not from the routers in the network. Therefore, col. 15, lines 55-67 of Datta fails to teach or suggest means for “receiving the ARP request from the other ones of the plurality of routers,” as recited in claim 23.

Claim 23 also recites,

means for performing the automated selection of the router to respond to the ARP request by applying an algorithm at each of the other ones of the plurality of routers to determine which single router is to respond to the ARP request.

In the rejection of claim 23, the Office Action asserts that the features recited above are disclosed in Datta, col. 15, lines 15-45 and Fig. 4 with router selector 406 and ARP responder 412 (See *Office Action*, page 12). However, that assertion is respectfully traversed. Fig. 4 shows that the controller 202 includes the router selector 406 and the ARP responder 412. Col. 15, lines 15-45 discloses the process of the controller 202 selecting one of the routers 110. As such, in Datta, the algorithm for selecting one of the routers is applied to the controller 202. Thus, in Datta, no algorithm is being applied at each of the other routers, as recited in claim 23. Therefore, Datta fails to teach or suggest “means for performing the automated selection of the router to respond to the ARP request by applying an algorithm at each of the other ones of the plurality of routers to determine which single router is to respond to the ARP request,” as recited in claim 23.

Claim 23 recites,

in each of the plurality of routers, ...
means for transmitting an address resolution protocol (ARP)
request to other ones of the plurality of routers in response to a
determination that the packet is to be routed by another one of the plurality
of routers.

In the rejection of claim 23, the Office Action correctly admits that Datta fails to teach or suggest the features recited above (See *Office Action*, page 12). The Office Action then asserts that the features recited above are disclosed in Bhaskaran, col. 2, lines 64-67, col. 3, lines 1-10, col. 4, lines 50-67, and col. 5, lines 1-10. *Id.* However, that assertion is respectfully traversed. In the cited passages, Bhaskaran discloses that the servers send the ARP requests to a failed router to obtain the MAC address of a functional router. Thus, in Bhaskaran, the ARP requests are sent to only one router. As such, the ARP requests are not sent to “other ones of the plurality of routers” (i.e., a plurality of routers). Therefore, Bhaskaran fails to teach or suggest that each router includes “means for transmitting an ARP request to other ones of the plurality of routers,” as recited in claim 23. Thus, Bhaskaran fails to cure the deficiencies of Datta.

For at least the foregoing reasons, the Examiner has failed to establish that claim 23 is *prima facie* obvious in view of the combined disclosures contained in Datta and Bhaskaran. Therefore, withdrawal of the rejection of claim 23 and allowance of this claim is respectfully requested.

- Independent Claim 17:

Independent claim 17 recites a method comprising, *inter alia*,

in a first router, receiving a packet from a requesting host for forwarding via a network, identifying a current load of the first router, determining whether the packet is to be routed by another one of the plurality of routers based upon the identified current load of the first router, and transmitting an address resolution protocol (ARP) request to other ones of the plurality of routers in response to a determination that the packet is to be routed by another one of the plurality of routers;

in the other ones of the plurality of routers, receiving the ARP request from the first router,
performing the automated selection of the router to respond to the ARP request by applying an algorithm at each of the other ones of the plurality of routers to determine which single router is to respond to the ARP request.

Thus, the features recited above in independent claim 17 are similar to the features recited in independent claim 23 as discussed above. Accordingly, claim 17 is also believed to be allowable over the cited documents of record for at least the same reasons as set forth above in connection with independent claim 23. It is therefore respectfully requested that the rejection of independent claim 17 be withdrawn, and this claim be allowed.

- Dependent Claims 18 and 21-22:

Claims 18 and 21-22 are dependent from independent claim 17. Thus, they are also believed to be allowable over the cited documents of record for at least the same reasons as set forth above in connection with independent claim 17. It is therefore respectfully requested that the rejection of claims 18 and 21-22 be withdrawn, and these dependent claims be allowed.

- Claims 19-20:

Claims 19-20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Datta in view of Bhaskaran and further in view of Wiryaman. This rejection is respectfully traversed for at least the following reasons.

Claims 19 and 20 are dependent from one of independent claim 17. As discussed above, the proposed combination of Datta in view of Bhaskaran fails to disclose all of the

features of independent claim 17. In setting forth the rejection of claims 19 and 20, the Examiner has not and cannot reasonably assert that the disclosure contained in Wiryaman makes up for any of the deficiencies with respect to the proposed combination. Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to modify the proposed combination of Datta in view of Bhaskaran with the disclosure contained in Wiryaman, the proposed modification would still fail to yield all of the features of independent claim 17.

For at least the foregoing reasons, the Examiner has failed to establish that claims 19 and 20 are *prima facie* obvious in view of the combined disclosures contained in Datta, Bhaskaran, and Wiryaman, as proposed by the Examiner. Therefore, withdrawal of the rejection of claims 19 and 20 and allowance of these claims are respectfully requested.

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Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited. Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below. Please grant any required extensions of time and charge any fees due in connection with this request to Deposit Account No. 08-2025.

Respectfully submitted,

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